7. Incident investigation, recording and reporting

7.1 Terminology

Terms such as incident and accident are sometimes used interchangeably, and this can cause some confusion. There are numerous definitions in use. However, the following seem to work quite well:

Incident - an unintended event that did, or had the potential to cause harm;

Accident - an incident that causes harm;

Near-miss - an incident that does not cause harm.

In other words accidents and near-misses are both types of incident with the occurrence of harm differentiating between whether it is an accident or near-miss.

7.2 Responding to an incident

When an incident occurs there are a number of activities that need to be carried out. They include:

- Protect personnel, the environment and property (emergency procedures and making safe);
- Report and determine the level of investigation required;
- Investigate the incident (gather data);
- Analyse the incident (use data to determine the cause);
- Capture and act on lessons learnt.

7.2.1 Immediate/emergency response

If someone has been hurt they will need to be attended to promptly. Even where someone has not been hurt, the occurrence of an incident means that something unplanned has occurred, and this may have created a hazard. Therefore robust procedures and arrangements are required to respond to incidents.

The purpose of emergency procedures is to mobilise the appropriate resources to minimise the harm caused by an incident. There are clearly different types and levels of response depending on the incident, ranging from local personnel responding through to calling in some or all of the emergency services.

Wherever possible, part of the immediate response should be to preserve the scene of the incident so that it can be investigated. If there has been a fatality or very serious injury the police must be notified as they will be responsible for determining if a crime has been committed.

7.2.2 Incident reporting

Whilst the immediate priority following an incident is to minimise harm, it is also important that the incident is reported so that any necessary longer term actions required can be implemented. As well as forming a record of the incident, a key part of reporting is to determine what level of investigation is required.

Companies usually have incident report forms where basic information can be recorded including date and time, people involved, consequences, ongoing activities and conditions at the time of the incident.

When there have been obvious consequences of an incident, getting it reported is not usually an issue. However, for near misses or where is it possible to cover up the consequences, under reporting is a problem. The reasons why people may not report an incident include:

- They do not know it is a requirement;
- They do not understand why it is necessary;
- They feel it is a waste of time (especially if it is perceived that nothing has ever happened in the past as the result of reporting incidents);
- They are worried that there may be reprisals for themselves or others (if it is perceived that people have been unfairly blamed or punished in the past).

There is a significant cultural element to whether incidents are reported. In particular, people need to feel there is a fair and just culture, where the root causes of incidents are identified properly.

7.3 Incident reporting and analysis

Incidents should be investigated so that the organisation can determine what happened and why. Key objectives at this stage include:

- Identifying substandard conditions and action and determining why they occurred:
- Identifying underlying failures in health and safety management;
- Learning from events;
- Preventing recurrence;
- Satisfying legal requirements.

Clearly it is not enough to just investigate and analyse. Incidents provide an invaluable insight into how an organisation functions in practice, and so should be used as an opportunity to improve. Also, it is unlikely that only the area directly affected by the incident are suffering from the same weaknesses in their arrangements, and publicising findings from investigations and analysis both within and outside the organisation is a valuable way of improving health and safety across the board.

7.3.1 Incident investigation

Investigations should commence as soon after an incident as possible. The main aim at this stage is to collect evidence. This can be in the form of:

- Information about the scene (photo and sketches of the scene);
- Physical items (equipment, parts, fragments, substances);
- Clinical (samples of breath, urine or blood);
- Environmental (samples from air, water, soil);
- Documents:
- Data print outs;
- CCTV footage;
- Interviews with people involved and witnesses.

This evidence can then be arranged to develop a time-line of what happened before, during and after the incident.

It is usually best to have a team of people involved in an investigation. This is partly because of the potential workload, but also because a number of skills are likely to be required. There are tools and techniques that can assist in investigation; and competence in these should be held by the team (i.e. by one or more individuals).

7.3.2 Incident analysis

The analysis of incidents is often considered to be part of the investigation. This may make some sense, but has a number of potential problems. In particular starting analysis before the investigation is complete can lead people to 'jump to conclusions,' which may result in them collecting evidence that supports a conclusion that may not be valid. Therefore, although they may well be carried out partly in parallel, it is useful to differentiate between investigation and analysis.

An analysis of an incident involves looking at the evidence collected to identify causes. These causes are generally broken into two distinct categories:

- Immediate causes features of premises, plant, substances, procedures and people that created a hazard or contributed to the incident. Often considered as unsafe conditions and actions;
- Underling causes failures of planning, risk assessment, control, cooperation, communication, competence, monitoring and review that resulted in the immediate causes being present and/or not dealt with. These are typically management and organisational failures.

As a result of analysis it is important that recommendations are developed to address the underlying causes. This means it is not only the exact incident that can be prevented, but a general improvement in safety can be achieved. To do this it is often necessary to consider previous incidents to identify any trends that indicate a wider problem than may be apparent from the single incident being analysed.

As with investigation, it is usually best if a team carry out the analysis. Once again competence in analysis tools and techniques should be held by the team.

7.3.3 Incident records

The whole point of reporting, investigating and analysing incidents is to contribute to the 'corporate knowledge' of an organisation, which gives an understanding of how the organisation functions and its weaknesses. Recording systems should collect information accurately and present it in a consistent form. Also, they should enable analysis of trends, record information that might be useful in the future (e.g. to avoid making the same mistakes when designing a new plant) and alert others to a problem.

7.3.4 Investigating ill health

In theory, instances of ill health associated with work should be reported, investigated, analysed and recorded in the same way as any incident. If the ill health arose because of a specific incident, and occurred soon after this is usually straightforward. The trouble is that a lot of ill health cannot be attributed to a specific incident and it can come on gradually.

The main concern is to find out the direct and underlying causes of ill health so that action can be taken to prevent recurrence. Therefore, it is essential that instances of ill health caused by work are reported and that this initiates the investigation process. The skills required to investigate and analyse are likely to be different to those for incidents, and this needs to be considered as part of the team competence.

7.4 Reporting incidents to HSE

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) require certain specified occurrences to be reported to HSE. They include:

- Death;
- Major injury (as specified, including significant fractures, amputation, dislocation etc.)'
- Hospitalisation for over 24 hours;
- Over three days off work due to injury;
- Reportable disease (as specified, including certain poisoning, skin and lung diseases, infection, cancer);
- Dangerous occurrence (as specified, including failure of lifting equipment, explosion, collapse of scaffolding etc.).

The regulations place duties on employers, self-employed and people in control of work premises.

Reference – 'RIDDOR explained' available free at http://www.hse.gov.uk/pubns/hse31.pdf

A note about the text

This is an excerpt from Health and Safety 2008 written by Andy Brazier, which covers all the key elements of health and safety as it stands as a discipline at the end of 2007. The book provides a quick reference, focussing on hazards in the workplace and practical controls of risk. The aim has been to present the health and safety processes so that, if these are understood, appropriate solutions to a very large range of health and safety issues can be developed. It provides links to freely available HSE guidance throughout.

The book has been arranged, to a large extent, around the syllabus of the NEBOSH National General Certificate (NGC). This is because the syllabus appears to provide a very comprehensive overview of all the key issues of health and safety. Also, by doing this it is hoped that the book will be a useful aid to people studying for the certificate, acting as a supplement to training material from course providers or to assist in self-study.

The draft text of the whole book is available at http://healthandsafetycertificate.blogspot.com/

If you would like a copy of the book or more information go to Andy's website at http://www.andybrazier.co.uk/Health&safety/book.htm